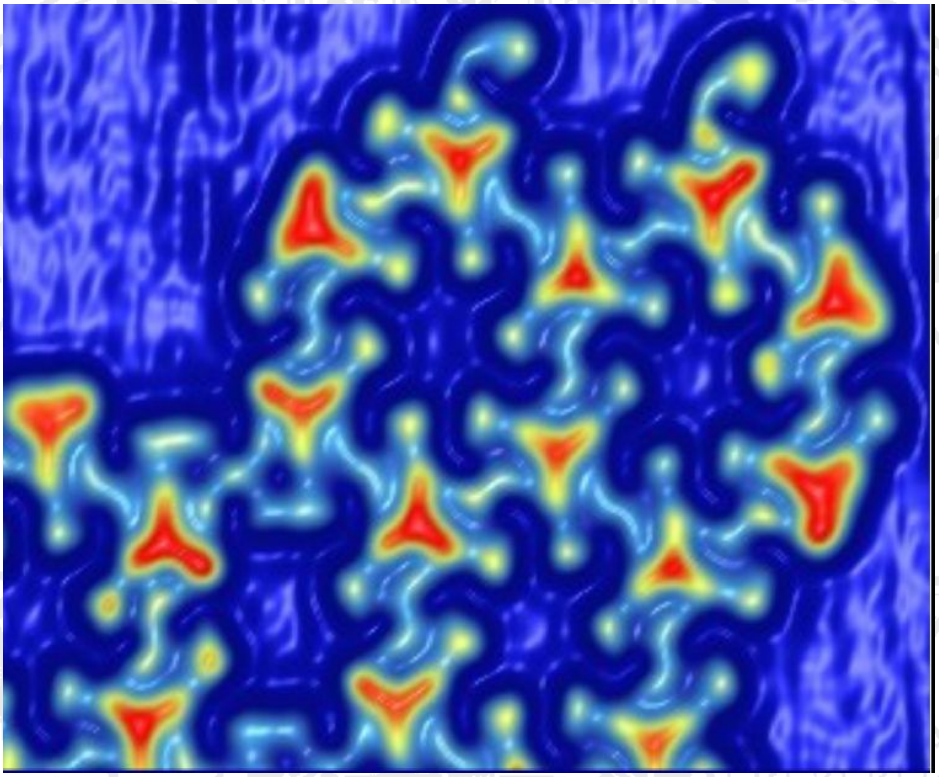
PHYSIKALISCHES KOLLOQUIUM

AM 2. FEBRUAR 2015 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



ATOMIC AND MOLECULAR CONTACTS: SPINS, FORCES, PHOTONS, NOISE

PROF. DR. RICHARD BERNDT

INSTITUTE OF EXPERIMENTAL AND APPLIED PHYSICS, UNIVERSITY OF KIEL

The electron transport through contacts to single molecules and atoms is investigated with low-temperature scanning probe microscopy. The experiments aim at maximizing the control over the junction properties. We measure the current, its shot noise, the acting forces and the emission of photons. The talk will highlight some results on the role of molecular structure and bonding, on quantum noise properties, and on spin effects.